STIC-Biotech/ChemLib

From:

Yu, Misook

Sent:

Tuesday, March 22, 2005 11:07 AM STIC-Biotech/ChemLib 09/830,338

To: Subject:

Pls do interference search of SEQ ID NO:1.

Examiner Misook Yu, Ph.D. 571-272-0839 (Phone) Art Unit 1642 REM-3A18 (Room) REM-3C18 (Mail Box)

STAFF USE ONLY
Searcher:
Searcher Phone: 2-
Date Searcher Picked up:
Date Completed:
Searcher Prep/Rev. Time:
Online Time:

Type of Search

NA#:_ AA#: SPDI: Interference:_ Oligomer:_ S/L:_ Encode/Transl: Structure#:_ __Text: Inventor: Litigation:_

****** Vendors and cost where applicable, STN:_ DIALOG:_ QUESTEL/ORBIT:_ LEXIS/NEXIS: SEQUENCE SYSTEM:_ www/Internet:_ Other(Specify):_

This Page Blank (uspto)

```
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
```

- protein search, using sw model OM protein

March 26, 2005, 09:08:03; Search time 27 Seconds Run on:

(without alignments)
3878.987 Million cell updates/sec

Title: Perfect score: Sequence:

US-09-830-338-1 7308 1 MATQQKASDERISQFDHNLL.....SKYLTILQKWILPFSPIIQK 1403

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters:

513545 seqs, 74649064 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

Issued Patents AA:

/cgn2 6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Description	, a	m ๋	7	2,7	23,	23,	8, 7	æ	æ	7	ω	Sequence 29, Appl	ω	8	22	8	ď	7	14,	Sequence 14, Appl	14	14,	14,	14,	42,	42,	Sequence 229, App
. De	Š	ώ.	Ø	Ñ	Ŋ	Ñ	Ø	Ö	Ω̈	Ö	Ö	Ñ		Ö	Ø	Ö	Ø	Š	Ö	Ñ	ď	ιΩ	ά		ď	ďΩ	Ø
ΠD	-09-705	-705-872	-08-836-134-	-09-493	-08-836-134	US-09-493-784-23	-08-511-	US-09-212-971-8	US-08-800-929A-8	US-08-569-749-2	US-09-617-053A-8	690-60-	-936-	-356-	US-09-672-717-223	US-09-201-932-8	US-09-689-366-2	PCT-US96-12860-2	US-09-212-971-14	800	US-08-569-749-14	US-09-617-053A-14	US-09-689-366-14	PCT-US96-12860-14	ч	US-09-011-356-42	US-09-672-717-229
DB	4.	4	m	4	m	4	~	ო	ന	ო	٣	ო	4	4	4	4	4	ഹ	ო	ო	ო	m	4	v	4	4	4
Length	1403	1295	1232	1232	1151	1151	618	618	618	618	618	618	618	618	618	618	618	618	612	612	612	612	612	612	591	591	591
% Query Match	100.0	91.6	87.2	87.2		81.5	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.0	6.0	6.0
Score	7308	6691	6373.5	6373.5	5955	5955	462	462	462	462	462	462	462	462	462	462	462	ø	457.5	457.5	457.5	457.5	457.5	457.5	441.5	441.5	441.5
Result No.	, 	03 (m	4	ß	9	7	60	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

Sequence 42, Appl Sequence 12, Appl	12,	Sequence 12, Appl	Sequence 10, Appl	10,	Sequence 10, Appl	Sequence 10, Appl	Sequence 10, Appl	Sequence 10, Appl	Sequence 225, App	Sequence 10, Appl	Sequence 4, Appli	Sequence 6031, Ap	Sequence 4, Appli	Sequence 4, Appli	Sequence 10878, A	Sequence 8, Appli
US-09-201-932-42 US-09-212-971-12	US-08-800-929A-12	US-09-617-053A-12	US-08-511-485-10	US-09-212-971-10	US-08-800-929A-10	US-09-617-053A-10	US-09-201-936-10	US-09-011-356-10	US-09-672-717-225	US-09-201-932-10	US-08-569-749-4	US-09-949-016-6031	US-09-689-366-4	PCT-US96-12860-4	US-09-949-016-10878	US-09-579-692B-8
4 W	ښ	ო	N	m	m	ო	4			4				വ	4	4
591 600	900	900	496	496	496	496	496	496	496	496	604	604	604	604	613	1140
0.9	6.0	9	6.0	0.9	6.0	6.0	6.0	6.0	6.0	6.0	0.9	0.9	9.0	6.0	6.0	6.0
441.5 440	440	440	437.5	437.5	437.5	437.5	437.5	437.5	437.5	437.5	436.5	436.5	436.5	436.5	436.5	435
28 29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

```
Sequence 1, Application US/09705872
; Sequence 1, Application US/09705872
; Patent No. 6617429
; GENERAL INFORMATION:
; APPLICANT: Kenji YAMAMOTO
; TITLE OF INVENTION: APOPTOSIS INHIBITORY PROTEIN, GENE ENCODING THE PROTEIN
; TITLE OF INVENTION: AND CDNA THEREOF
; FILE REFERENCE: 2000-1110/LC/00653
; CURRENT APPLICATION NUMBER: US/09/705,872
; CURRENT FILING DATE: 1999-01-29
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241 QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MATOOKASDERISOFDHNLLPELSALLGLDAVQLAKELEEEEOKERAKMOKGYNSOMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181 LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 1403;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 7308; Best Local Similarity 100.0%; Pred. No. 0; Matches 1403; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1403
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-705-872-1
RESULT 1
US-09-705-872-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
```

ö

120

9 9

180

240

300 360 301 KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDFLDDHTRCFPNCPFLQNMKSSAEVTPDLQS 360

XAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS

301

ò

```
THE PROTEIN
                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCWRNIIQ 540
                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                                        AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                             61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LSEAGFVFTGKODTVOCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDFLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KKIAFLWASGCCPLINRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                           MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 HPDCGFLLINKDVGNIAKYDIRVKNLKSRLRGGKWRYQEEBARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AFPFYNTVCILRKLFSHNMTRLRKFWVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                  Gaps
                   Sequence 3, Application US/09705872

| Sequence 3, Application US/09705872
| Patent No. 6617429
| GENERAL INFORMATION:
| APPLICANT: Joh-E IKEDA
| APPLICANT: Kenji YAMAMOTO
| TITLE OF INVENTION: AND CDNA THEREOF
| FILE REFERENCE: 2000-1110/LC/00653
| CURRENT APPLICATION NUMBER: US/09/705,872
| CURRENT FILING DATE: 2000-11-06
| PRIOR FILING DATE: 1999-01-29
| NUMBER OF SEQ ID NOS: 8
| SOFTWARE: Patentin Ver. 2.0
| SOFTWARE: Patentin Ver. 2.0
| SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                        Length 1295
                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                 2; Mismatches
                                                                                                                                                                                                                                                                                        Score 6691;
Pred. No. 0;
                                                                                                                                                                                                                                                                                        91.6%;
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 99.8
Matches 1282; Conservative
                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Homo sapiens
                                                                                                                                                                                                                        1295
                                                                                                                                                                                                                                                         JS-09-705-872-3
                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        원
장
연
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           원
장
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 B 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     역
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8 8
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961 ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021 MTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141 EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ 1260
                                                   480
                                                                                                     540
                                                                                                                                                        900
                                                                                                                                                                                                           999
                                                                                                                                                                                                                                     099
                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                        420
                                                                           480
                                                                                                                    481 KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ 540
                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                          PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ 840
                                                                                                                                                                                                                                                                                                                                                                                                                       MQLLRGLWQICPQAYFSWVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901 QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW 960
                                                                                                                                                                      541 QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                                                                                                               FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361 RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                   LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                       QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                                                            AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                              AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKTQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                               FDDVAVFKSYMERLSLRNKATAETLKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                  EDLIMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                                                                                                                                                  PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  841 MÓLLRGLWÓICPÓAYFSMVSEHLLVLALKTAYÓSNTVAACSPFVLÓFLÓGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QLHCLRVLSFFKTLNDDSVVEIAKVAISGGFQKLENLKLSINHKITEEGYRNFFQALDNM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PNLQELDISRHFTECIKAQATTVKSLSQCVLRLPRLIRLNMLSWLLDADDIALLNVMKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HPOSKYLTILOKWILPFSPIIOK 1403
                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1321
                                                                          421
                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                  421
                                                                                                                                                        541
                                                                                                                                                                                                           601
                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                    481
                                                                                                                                                                                                                          g &
                                                                                                                                                                                                                                                                                원
장
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                    8 8
                                                                                                                                                                                                                                                                                                                                                                                                                8
8
8 6
                                              के वि
                                                                                                                                                  6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  상
임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S B S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 8
```

180 180 240 240 300

300 360 360 420 420 480 540 540 900 900 9 9 720 720 780

780 840

480

120 120

```
ERNIAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLBIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 HPDCGFLLINKDVGNIAKYDIRVKNIKSRLRGGRWRYQEBEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELBEBEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                            QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                               LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                              QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                  RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                               RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPBVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FDDVAVPKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EDLIMCIMSKFTAQRIRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QYFFDHPESLSLLRSIHFSIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EDLTWCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PMMTVSAYNNPLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLO
                               61
                                                                                                                                                               181
                                                                                                                                                                                              181
                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1081
                       品 名 品 谷
                                                                                                                                                      6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                   8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8 8
                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                              961 ERNIAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                               1081 SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08836134A

Sequence 2, Application US/08836134A

Patent No. 6020127

GENERAL INFORMATION:

APPLICANT: Mackenzie, Alex E.

APPLICANT: Mackenzie, Alex E.

APPLICANT: Mackenzie, Mani S.

APPLICANT: Mahadevan, Mani S.

APPLICANT: McLean, Michael

APPLICANT: Roy, Natalie

APPLICANT: Nov. 0.06-00

TITLE OF INVENTION: Neuronal Apoptosis Inhibitor Protein, Gene Sequence and

Patent No. 6020127

TITLE OF INVENTION: Mutations Causative of Spinal Muscular Atrophy

TITLE OF INVENTION NUMBER: US/08/836,134A

CURRENT APPLICATION NUMBER: US/08/836,134A

CURRENT PILING DATE: 1997-06-20

NUMBER OF SEQ ID NOS: 23

SOFTWARE: PatentIN Ver. 2.0

SECTIVAL OF TANGENT OF 
                                                                                                                                                                                                                                                                                                                                                                                                              SLEVSGTIQSQDQIPPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SLPNFISLKIINLEGQQPPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ 1260
                                                                               840
                                                                                                           840
                                                                                                                                              900
                                                                                                                                                                              900
                                                                                                                                                                                                              960
                                             780
                                                                                                                                                                                                                               901 QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                             BDLTMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIBLLDSDRQEHQDLGLYHLKQINS
                                                                           PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ
                                                                                                                                           MQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                           QYFFDHPESLSLIRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                            BRNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL
                                                                                                                                                                                                                                                                                                                                           MIVPSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MATQQKASDERISQPDHNLLPELSALLGLDAVQLAKELEBEBGKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 6373.5;
Pred. No. 0;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QLHCLRVLSFFKTLNDDSVVEIAKV 1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 87.2%;
Best Local Similarity 95.9%;
Matches 1229; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-08-836-134-2
                                                                                                          781
                                          721
                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                          781
                                                                                                                                           841
                                                                                                                                                                                                           901
                                                                                                                                                                                                                                                                            961
                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
              721
                                                               6 8 6 8 6 8 6
             8 8
                                                                                                                                                                                                                                                                                                                                                                  중
음
                                                                                                                                                                                                                                                                                                                                                                                                                                 8 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 & 8
```

1080

960

960

900

```
1261 QLHCLRVLSFFKTLNDDSVVEI 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EYDPSKL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1210 QLHCLRVLSFFKTLNDDSVVEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 5
US-08-836-134-23
                                                                                                                                                                        661
                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                           961
                                                                                                                                                                                                                                                                                                                                                                                                                 196
                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1141
                 421
                                                                                                                              601
                                                                                                                                                                                             199
                                                                                                                                                                                                                                                             781
                                                               481
                                                                                                         541
                                                                                                                                                                                                                  721
                                          481
                                                                                    541
421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                          8 & 8
                                                                                                                          8 G
                                                                                                                                                                8
                                                                                                                                                                                        a
                                                                                                                                                                                                                  8
                                    ℅
                                                                                                                                            RESULT 4
US-09-493-784-2
; Sequence 2, Application US/09493784
; Patent No. 6429011
; GENERAL INFORMATION:
; APPLICANT: Mackenzie, Alex E.
; APPLICANT: Mackeran, Mani S.
; APPLICANT: Mackeran, Mani S.
; APPLICANT: Mackeran, Machael
; APPLICANT: Roy, Natalie
; APPLICANT: Roy, Natalie
; APPLICANT: Now Nouronal Apoptosis Inhibitor Protein, Gene Sequence
; TITLE OF INVENTION: Mutations Causative of Spinal Muscular Atrophy
; FILE REFERENCE: 3477-112, 033477/139914
; CURRENT APPLICATION NUMBER: US/09/493,784
; CURRENT FILING DATE: 1997-06-20
; PRIOR FILING DATE: 1997-06-20
; NUMBER OF SEQ ID NOS: 23
; SOFTWARER: PatentIn Ver. 2.0
                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KAGLEYTGIKDIVQCFSCGGCLEKWQEGDDFLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNINEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 AKBLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIBDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEBEEQKERAKMQKGYNSQMRSE
                                AV-----
                                                      SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4; Length 1232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 87.2%; Score 6373.5;
Best Local Similarity 95.9%; Pred. No. 0;
Matches 1229; Conservative 1; Mismatches
                                                                                                QLHCLRVLSFFKTLNDDSVVEI 1282
                                                                                                            1210 QLHCLRVLSFFKTLNDDSVVEI 1231
                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
US-09-493-784-2
                                 EYDPSKL-
                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 2
LENGTH: 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                 1141
                                                        1201
                                                                                                  1261
               1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B & B &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  중
음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                              g
                                                ₹
                                                                        8 % B
               ठे
```

```
1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23, Application US/08836134A
Sequence 23, Application US/08836134A
Sequence 23, Application US/08836134A
Sequence 23, Application US/08836134A
GENERAL INFORMATION:
APPLICANT: Mackenzie, Alex E.
APPLICANT: Mahadevan, Mani S.
APPLICANT: McLean, Michael
APPLICANT: Roy, Natalie
APPLICANT: Ikeda, Joh-e
TITLE OF INVENTION: Neuronal Apoptosis Inhibitor Protein, Gene Sequence and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ERNILAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                   009
                                                                                                                                                                                                                     099
                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                  900
                                                                                                                                                                                      99
              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1201 SLPNFISLKIINLEGOOFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQOCO
                                                                                                                                      MOLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ERNIABKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLBIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĀV-----
                                                                                                                  QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                                                            PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ
                                                                                                                                                                                                                                                                                                                                                                                                                EDLIMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
KKIAFLWASGCCPLLNRPQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                         FDDVAVPKSYMERISIRNKATABIIKATVSSCGELALKGFFSCCFEFNDDDLABAGVDED
                                                                                                                                                                                      APPFYNTVCI LRKLFSHNMTRLRKFMVYFGKNQSLOKI QKTPLFVAAI CAHWFQYPFDPS
```

```
241 QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 1139; Conserv
                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                      E 1141
                                                                                                                                                                                                                                           E 1150
                                              901
                                                                                        961
                                                                                                                                   1021
                                                                                                                                                                             1081
                                                                                                                                                                                                 1090
                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                            1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                    g
                                             8 8 8
                                                                                                       8
                                                                                                                                 ઠે
                                                                                                                                                 요
장
                                                                                                                                                                                             ద
                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                      129
                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                           249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                     130 HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV 189
                                                                                                                                                                                                                                                                                                                                                                                    309
                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                369
                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK 600
                                                                                                                                                                                                           69
                                                                                                                                                                                                                                           70 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10 MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                               61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                          HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                      LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWPPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                 LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                              QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYBELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                            QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                                          KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                        KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDFLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPFYNTVCILRKLFSHNMTRLRKFWVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PDDVAVPKSYMERLSLRNKATAEILKATVSSCGELALKGPFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EDLTMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MATQQKASDERISQPDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                  Gaps
               Muscular Atrophy
                                                                                                                                                                .;
0
                                                                                                                                           Length 1151;
                                                                                                                                                                1; Indels
; Patent No. 6020127
; TITLE OF INVENTION: Mutations Causative of Spinal Muss; FILE REFERENCE: 3477-112, 033477/139914
; CURRENT APPLICATION NUMBER: US/08/836,134A
; CURRENT FILING DATE: 1997-06-20
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 1151
; TYPE: PRT
                                                                                                                                             .
9
                                                                                                                                             DB
                                                                                                                                          81.5%; Score 5955; D
99.8%; Pred. No. 0;
ive 1; Mismatches
                                                                                                                                          Query Match
Best Local Similarity 99.8
Matches 1139; Conservative
                                                                                                                    US-08-836-134-23
                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                          190
                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                    250
                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                               310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   610
                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 790
                                                                                                                                                                                                     8
                                                                                                                                                                                                                            ਨੇ
                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                               요
                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     요 장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ਨੇ
```

```
APPLICANT: Mackenzie, Alex B.
APPLICANT: Mackenzie, Alex B.
APPLICANT: Mahadevan, Mani S.
APPLICANT: Mahadevan, Mani S.
APPLICANT: Mahadevan, Machael
APPLICANT: McLean, Michael
APPLICANT: Roy, Natalie
FILE OF INVENTION: Mutations Causative of Spinal Muscular Atrophy
FILE REFERENCE: 3477-112, 033477/139914
CURRENT APPLICATION NUMBER: US/09/493,784
CURRENT APPLICATION NUMBER: 08/836,134
PRIOR PILING DATE: 1997-06-20
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 23
LENGTH: 1151
TYPE: PRT
                                                                                                                                                                                  1020
                                                                                                                                                                                                                                       1029
                                                                                                                                                                                                                                                                                                                                          1089
                                                                                                                                                                                                                                                                                                                                                                                            SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEBFPNFHHMBKLLIQISA 1140
                                                                                                                                                                                                                                                                                                                                                                                                                          SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1149
                                                                                                                                                                                                                                                                                         MTVFSASORIBLHLNHSRGFIBSIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE 1080
                                                                               960
                                                                                                                                696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                         606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130 HPDCGFLLINKDVGNIAKYDIRVKNIKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190 LSEAGFVFTGKODTVOCFSCGGCLGNWEEGDDPWKEHAKWPPKCEFLRSKKSSEEITQYI 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69
                                                                                                                                                                                                           ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL
                                                                                                           QYFFDHPESLSLLRSIHFSIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                  BRNLAEKEDNVKSYMDMORRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL
850 MQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQPLQGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                         70 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                           QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 MATOOKASDERISOFDHNLLPELSALLGLDAVQLAKELEEEEOKERAKMOKGYNSOMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HPDCGFLLNKDVGN1AKYD1RVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQG1SPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 5955; D
Pred. No. 0;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-493-784-23; Sequence 23, Application US/09493784; Patent No. 6429011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens
US-09-493-784-23
```

φ

```
KHISKPVQEPLVLPEVFGNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG----- 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145 -----CEEEARLASFRWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          256 TLRFSIS------NLSMQT-----HAARMRTFMYWPSSVPVQ 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PDLOSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     346 DEIQGRYPHLLEQLLSTSDTTGEEN--ADPPIIHFGPGESS-SEDAVMMNTPVVKSALEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SF-----ATDHLIGCDLSIAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 VKCFCCGLMLDNWKLGDSPIQKHKQLYPSCSFIQNLVSASLGSTSKNTSPMRNSFAHSLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     176 ISPCVLSEAGFVFTGKQDTVQCFSCGGCLGNWEBGDDPWKEHAKWFPKCEFLRSKKSSEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38 LEEEEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---OEMAAAGFYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95 IOCFCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.3%; Score 462; DB 2; Length 618
24.7%; Pred. No. 5.9e-33;
Live 93; Mismatches 238; Indels
                                                     STACE.

CITY: Boc.

STATE: MA

COUNTRY: USA

ZIP: 02110-2804

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: 07646/002001

REFERENCE DOCKET NUMBER: 07540/002001

REGISTRATION NUMBER: 30.162

REFERENCE DOCKET NUMBER: 30.162

REFERENCE DOLS4

ITELEPHONE: 617/542-8906

INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LEMCTH: 618 amino acids

TYPE: amino acids

TYPE: amino acids

TYPE: Doch

MOLECULE TYPE: protein

*0-511-485-8

*6.3%; Score 4

*6.3%; Score 4

*7.7%; Pred.
 PROBES, AND DETECTION METHODS
                                            E: Fish & Richardson 225 Franklin Street
               NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Ri
STREET: 225 Franklin
 OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            තු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ें ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               970 ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021 MTVFSASORIBLHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1081 SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1140
                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                696
                                              360
                                                                           369
                                                                                                         420
                                                                                                                                     429
                                                                                                                                                                  480
                                                                                                                                                                                               489
                                                                                                                                                                                                                                            490 KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ 549
                                                                                                                                                                                                                                                                                                                                                                              699
                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                       FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW 960
                                                                                                                                                                                                                                                                                       QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EDLIMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         850 MQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
310 KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                    370 RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                  430 LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                            KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEXEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                 601 AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                   610 AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKTQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                                                          FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           790 PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         910 QYFFDHPESLSLLRSIHFSIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                   LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8, Application US/08511485
Patent No. 5919912
GENERAL INFORMATION:
APPLICANT: Korneluk, Robert G.
APPLICANT: Mackenzie, Alexander E.
APPLICANT: Baird, Stephen
TITLE OF INVENTION: MAMMALIAN IAP GENE FAMILY, PRIMERS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141 E 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E 1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-511-485-8; Sequence 8, Apj; Patent No. 591; GENERAL INFORM
                                                                                                                                                                                                                                                                                                                                                                                                                                       670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1150
                250
                                              301
                                                                                                        361
                                                                                                                                                                  421
                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                       g
                g
                                            à
                                                                      셤
                                                                                                    8 &
                                                                                                                                                               δ
                                                                                                                                                                                      g
                                                                                                                                                                                                                   ∂
                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                   8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     දු දු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

24;

Gaps

154;

Length 618;

80 94

```
g
                                                                 셤
                                                                                                                    ð
                                                                                                                                                      셤
                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
GAPLICANT: MacKenzie, Alexander E
APPLICANT: Baird, Stephen
APPLICANT: Tang, Benjamin K
APPLICANT: Tang, Benjamin K
APPLICANT: Trang, Benjamin K
APPLICANT: Pratt, Christine
TITLE OF INVENTION: DETECTION AND MODULATION OF IAPS AND
TITLE OF INVENTION: DISEASE
TITLE OF INVENTION: DISEASE
TITLE OF INVENTION: DISEASE
TITLE OF INVENTION: DISEASE
TITLE OF INVENTION NUMBER: US/09/212,971B
CURRENT FILING DATE: 1998-12-16
EARLIER APPLICATION NUMBER: 60/017,354
EARLIER PILING DATE: 1996-11-14
EARLIER PILING DATE: 1996-11-14
EARLIER APPLICATION NUMBER: 08/800,929
EARLIER FILING DATE: 1997-02-13
NUMBER OF SEQ ID NOS: 17
SOFUTURE FARESE FARESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81 VKCFCCGLMLDNWKLGDSPIQKHKQLYPSCSFIQNLVSASLGSTSKNTSPMRNSFAHSLS 140
                                                                         523 IFKNC---LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEEQLRRLQEERTCKVCMDKEV 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     463 KNRMALFQQLTCVLPILDNLLKANVINKQEHDIIKQKTQIPLQARELIDTIWVKGNAAAN 522
                                              ----CCPLIANRFQLVFYLSLSSTR----PDEGLASIICDQLLEK--EGSVTEMCMRNII 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       145 -------LKSRL-----RGGKMRY--QEBEARLASFRNWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             176 ISPCVLSEAGFVFTGKODTVQCFSCGGCLGNWEEGDDPWKEHAKWPPKCEFLRSKKSSEE 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      256 TLRFSIS------NLSMQT-----HAARMRTFMYWPSSVPVQ 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              287 PEQLASAGFYYVGRNDDVKCFGCDGGLRCWESGDDPWVEHAKWFPRCEFLIRMKGQ-EFV 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PDLOSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        346 DEI QGRYPHILE QLISTSDTTGEEN -- ADPIIHFGPGESS - SEDAVMMNTPVVKSALEM 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95 IQCFCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKOVGNIAKYDIRVKN-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38 LEEEEQKERAKMQKGYNSQMRSEAKRLKTFVTYEPYSSWIP---QEMAAAGPYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93; Mismatches 238; Indels 154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.3%; Score 462; DB 3; Length 618; 24.7%; Pred. No. 5.9e-33;
                                                                                                                                                                                     580 ----SVVFIPCGHLVVC---QECAPSLRKCPICRGIIKGTVRT 615
                                                                                                                                       540 QQLKNQVLFLLDDYKBICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
                                                                                                                                                                                                                                                           RESULT 8
US-09-212-971-8
; Sequence 8, Application US/09212971B
; Patent No. 6107041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 24.74
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28
                                         ઠે
                                                                                g
                                                                                                                               8
                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
APPLICANT: Liston, Peter
APPLICANT: Baird, Stephen
APPLICANT: Tsang, Benjamin K
APPLICANT: Pratt, Christine
TITLE OF INVENTION: DETECTION AND MODULATION OF
TITLE OF INVENTION: IAPS AND NAIP FOR THE DIAGNOSIS AND TREATMENT OF PROLIFERATIVE
TITLE OF INVENTION: DISEASE
                                                                                                                                                463 KNRMALFÖQLTCVLPILDNLLKANVINKQEHDIIKQKTQIPLQARELIDTIWVKGNAAAN 522
                                                                                                                                                                                                   491 ----CCPLLNRFQLVFYLSLSSTR-----PDEGLASIICDQLLEK--EGSVTEMCMRNII 539
-ATDHLLGCDLSIAS 442
                            | : : |||:
403 GFNRDLVKQTVLSKILTTGENYKTVNDIVSALLNAEDEKREEEKEKQAEEMASDDLSLIR 462
                                                                                                                                                                                                                                523 IFKNC---LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEEQLRRLQEERTCKVCMDKEV
                                                                                                443 KHISKPVQEPLVLPEVFGNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 618;
                                                                                                                                                                                                                                                                                                                                                 580 ----SVVFIPCGHLVVC---QECAPSLRKCPICRGIIKGTVRT 615
                                                                                                                                                                                                                                                                                                        540 QQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 462; DB 3;
Pred. No. 5.9e-33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/800,929A
FILING DATE: 13-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07891/009001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/030,590
FILING DATE: 14-NOV-1996
APPLICATION NUMBER: 60/017,354
FILING DATE: 26-APR-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bieker-Brady, Kristina
REGISTRATION NUMBER:
REFERENCE/DOCKET NUMBER:
TELEPHONE: 617-428-0200
TELEPHONE: 617-428-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8, Application US/08800929A Patent No. 6133437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : Korneluk, Robert G
: MacKenzie, Alexander
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
STREET: 176 Federal Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 618 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: 617-428-7045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Boston
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Bost
STATE: MA
COUNTRY: U
415 SF-
                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-800-929A-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-800-929A-8
```

```
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                   ઠે
24;
                                                                                                                                                                                                                                                                                                                             523 IFKNC---LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEEQLRRLQEERTCKVCMDKEV 579
                                                                                                              140
                                                                                                                                                                                                                256 TLRFSIS------HARMRTFMYWPSSVPVQ 286
                                                                                                                                                                                                                                                                                                                                                                356 PDLOSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFOEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                                                                          346 DEIQGRYPHLLEQLLSTSDTTGEEN--ADPPIHFGPGESS-SEDAVMNTPVVKSALEM 402
                                                                                                                                                                                                                                                                                                                                                                                                                        SF-----ATDHLLGCDLSIAS 442
                                                                                                                                                                                                                                                                                                                                                                                                                                          | ::|||||
403 GFNRDLVKQTVLSKILTTGENYKTVNDIVSALLNAEDEKREEEKEKQAEEMASDDLSLIR 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443 KHISKPVQEPLVLPEVFGNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG---- 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KNRMALFQQLTCVLPILDNLLKANVINKQEHDIIKQKTQIPLQARELIDTIWVKGNAAAN 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----CCPLLNRFQLVFYLSLSSTR-----PDEGLASIICDQLLEK--EGSVTEMCMRNII 539
                                                                                                                                        -----LKSRL-----RGGKMRY--QEEEARLASFRNWPFYVQG 175
                                                                                                                                                         176 ISPCVLSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEE 235
                                                                                                                                                                                                                                                     236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG 295
                                                                                                                                                                                                                                                                                                          296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                     80
                          94
                                                95 IQCFCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN-----
                                                                                                  38 LEEEEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---OEMAAAGFYFTGVKSG
93; Mismatches 238; Indels 154; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540 QQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           & HERBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patentin Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/08569749

Patent No. 6187557

GENERAL INFORMATION:

APPLICANT: Goeddel, David V

TITLE OF INVENTION: INHIBITORS OF APOPTOSIS

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON &

STREET: 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALBRITTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/569,749
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 4 Embarcadero
CITY: San Francisco
STATE: California
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
US-08-569-749-2
   159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           580
                                                                                                                                           145
   Matches
                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                셤
                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                            g
                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                      à
                              ö
                                                   g
                                                                                    δ
                                                                                                                                          8
```

```
295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            346 DEIQGRYPHLLEQLLSTSDTTGEEN--ADPPIIHFGPGESS-SEDAVMWNTPVVKSALEM 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            415 SFRHMSLLDISSDLATDHLLGCDLSIASKHISKPVOEP-LVLPEVFGNLNSVMCVEGEAG 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 PTLBHSSLFSGSYSSLSPNPLNSRAVEDISSSRTNPYSYAMSTEEARFLTYHMWP--LTF 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ISPCVLSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEE 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------LKSRL-----RGGKMRY--QEEEARLASFRNWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: MacKenzie, Alexander E
APPLICANT: Liston, Peter
APPLICANT: Baird, Stephen
APPLICANT: Tsang, Benjamin K
APPLICANT: Pratt, Christine
TITLE OF INVENTION: DETECTION AND MODULATION OF IAPS AND
TITLE OF INVENTION: NAIP FOR THE DIAGNOSIS AND TREATMENT OF PROLIFERATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256 TLRFSIS-------NLSMOT------HAARMRIFMYWPSSVPVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               356 PDLOSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               474 SGKTVLLK-KIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          439 DEKREEEKEKQAEEMASDDLSLIRKNRMALFQQLTCVLP-----ILDNLLK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               403 GFNR-------DL------DL-----VKQTVQSKILTTGENYKTVNDIVSALLNAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               38 LEBEEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---QEMAAAGFYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95 IQCECCSLILFGAGLTRLPIBDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN-----
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           533 MCMRNIIQQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDI
                                                                                                                                                                                                                                                                                                                                                                6.3%; Score 462; DB 3; Length 618;
26.0%; Pred. No. 5.9e-33;
Live 82; Mismatches 214; Indels 146;
NAME: Brezner, David J.
REGISTRATION NUMBER: 24,774
REFERENCE/DOCKET NUMBER: A-62464/DJB
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415)781-1989
TELEFAX: (415)398-3249
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 618 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-617-053A-8; Sequence 8, Application US/09617053A; Patent No. 6300492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Korneluk, Robert G
                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 155; Conservative
                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                         TYPE: amino a STRANDEDNESS:
                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                        US-08-569-749-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     485
                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                 Best Local
```

Q

```
24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          490
                                                                                                                                                                                                                                                                                                                                                                                                  144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141 PTLEHSSLFSGSYSSLPPNPLNSRAVEDISSSRTNPYSYAMSTEEARFLTYHMWP--LTF 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------LKSRL-----RGGKWRY--QEERARLASFRNWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256 TLRFSIS-------NLSMQT-----HAARMRTFMYWPSSVPVQ 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         287 PEQLASAGFYYVGRNDDVKCFGCDGGLRCWESGDDPWVEHAKWFPRCEFLIRMKGQ-EFV 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            356 PDLQSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | : : | | | | | GENRDLVKQTVLSKILTTGENYKTVNDIVSALLNAEDEKREEBKEKQAEEMASDDLSLIR 462
                                                                                                                                                                                                                                                                                                                            94
                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                        LEEEEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---OEMAAAGFYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                 IQCPCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN-----
                                                                                                                                                                                                                                                                                                                                                                                                                   81 VKCFCCGLMLDNWKLGDSPIQXHKQLYPSCSFIQNLVSASLGSTSKNTSPMRNSFAHSLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          176 ISPCVLSEAGFVFTGKODTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346 DRIQGRYPHLLEQLLSTSDTTGEEN--ADPPIIHFGPGESS-SEDAVMMNTPVVKSALEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SP------ATDHLIGCDLSIAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KHISKPVQEPLVLPEVFGNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----CCPLLNRFQLVFYLSLSSTR----PDEGLASIICDQLLEK--EGSVTEMCMRNII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      523 IFKNC---LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEEQLRRLQEERTCKVCMDKEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           463 KNRMALFQQLTCVLPILDNLLKANVINKQEHDIIKQKTQIPLQARELIDTIWVKGNAAAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 29, Application US/09069023A
Patent No. 6348573
GENERAL INFORMATION:
APPLICANT: Nunez, Gabriel
APPLICANT: Inchara, Nachiro
APPLICANT: Koseki, Takeyoshi
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR IDENTIFYING APOPTOSIS
TITLE OF INVENTION: SIGNALING PATHWAY INHIBITORS AND ACTIVATORS
                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                           154;
                                                                                                                                                                                                                                                    6.3%; Score 462; DB 3; Length 618; 24.7%; Pred. No. 5.9e-33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540 QQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
                                                                                                                                                                                                                                                                                      93; Mismatches 238;
             FILE REFERENCE: 07891/009003
CURRENT APPLICATION NUMBER: US/09/617,053A
CURRENT FILING DATE: 2000-07-14
PRIOR APPLICATION NUMBER: US 08/800,929
PRIOR FILING DATE: 1997-02-13
NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
LENGTH: 618
                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                     Similarity
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-09-069-023-29
                                                                                                                                                                                                                 US-09-617-053A-8
                                                                                                                                                                                                                                                                                         159;
                                                                                                                                                                                                                                                                                                                                                                                               92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          443
                                                                                                                                                                                                                                                                                                                         38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                491
                                                                                                                                                                                                                                                    Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                           28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                               ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ሯ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LKSRL-----RGGKMRY--QEBEARLASFRNWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 PTLEHSSLFSGSYSSLSPNPLNSRAVEDISSSRTNPYSYAMSTEEARFLTYHMWP--LTF 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ISPCVLSEAGFVFTGKQDTVQCFSCGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEE 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  346 DEIQGRYPHILEQILSTSDTTGEEN--ADPPIIHFGPGESS-SEDAVMMNTPVVKSALEM 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          415 SFRHMSLLDISSDLATDHLLGCDLSIASKHISKPVQEP-LVLPEVFGNLNSVMCVEGEAG 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            474 SGKTVLLK-KIAPLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTE 532
                                                                                                                                                                                                                                                                                                                                                                                           95 IQCFCCSLILFGAGLTRLPIBDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN----- 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         356 PDLQSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                    533 MCMRNIIQQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDI 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GPNR-----DL------VKQTVQSKILTTGENYKTVNDIVSALLNAE
                                                                                                                                                                                                                                                                                                            38 LEBEEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---QEMAAAGFYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----ILDNLLK-----
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6.3%; Score 462; DB 3; Length 618;
26.0%; Pred. No. 5.9e-33;
ative 82; Mismatches 214; Indels 146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8. Application US/09201936
; Sequence 8. Application US/09201936
; Patent No. 6541457
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: MacKenzie, Alexander E.
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: MAMMALIAN IAP GENE FAMILY, PRIMERS,
; TITLE OF INVENTION: PROBES, AND DETECTION METHODS
; FILE REFERENCE: 07991/030303
; CURRENT APPLICATION NUMBER: US/09/201,936
; CURRENT FILING DATE: 1998-12-01
; EARLIER APPLICATION NUMBER: 09/011,356
; EARLIER PILING DATE: 1998-02-04
; EARLIER PILING DATE: 1998-02-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   439 DEKREEEKEKQAEEMASDDLSLIRKNRMALFQQLTCVLP-
FILE REFERENCE: UM-03333
CURRENT APPLICATION NUMBER: US/09/069,023A
CURRENT FILING DATE: 1998-04-27
NUMBER OF SEQ ID NOS: 38
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 29
                                                                                                                                                                                                                                                                  155; Conservative
                                                                                                                                                             ; ORGANISM: Homo sapiens
US-09-069-023-29
                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-201-936-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <del>a</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                       24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81 VKCFCCGLMLDNWKLGDSPIQKHKQLYPSCSFIQNLVSASLGSTSKNTSPMRNSFAHSLS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | | : | : : | : ::| : ::| | : ::| | : ::| | : ::| | : ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDFLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KHISKPVQEPLVLPEVFCNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG----- 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     463 KNRMALFQQLTCVLPILDNLLKANVINKQEHDIIKQKTQIPLQARELIDTIWVKGNAAAN 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----CCPLINRFQLVFYLSLSSTR----PDEGLASIICDQLLEK--EGSVTEMCMRNII 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----LKSRL-----RGGKMRY--QEEEARLASFRNWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             356 PDLOSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28 LSDWINSNKQKWKYDFSCE-----LYRMSTYSTFPAGVPVSERSLARAGFYYTGVNDK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38 LEEEEQKERAKMQKGYNSQMRSEAKRLKTFVTYEPYSSWIP---QEMAAAGFYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95 IQCFCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  176 ISPCVLSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LSPSELARAGFYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPFL---ENSLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                            Query Match 6.3%; Score 462; DB 4; Length 618; Best Local Similarity 24.7%; Pred. No. 5.9e-33; Matches 159; Conservative 93; Mismatches 238; Indels 154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540 QQLKNQVLFLLDDYKBICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----SVVFIPCGHLVVC---QECAPSLRKCPICRGIIKGTVRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 8, Application US/09011356A
Patent No. 6656704
GENERAL INFORMATION:
APPLICANT: Korneluk, Robert G.
APPLICANT: MacKenzie, Alexander E.
APPLICANT: Baird, Stephen
APPLICANT: Liston, Peter
TITLE OF INVENTION: MAMMALIAN IAP GENE FAMILY, PRIMERS,
TITLE OF INVENTION: PROBES, AND DETECTION METHODS
EARLIER FILING DATE: 1996-08-05
; EARLIER APPLICATION NUMBER: 08/576,956
; EARLIER FILING DATE: 1995-12-22
; EARLIER APPLICATION NUMBER: 08/511,485
; EARLIER FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 8
                                                                                                                                                                                                                   3Q ID NO 8
LENGTH: 618
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SF-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 14
US-09-011-356-8
                                                                                                                                                                                                                                                                                                                                         US-09-201-936-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
```

```
296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141 PTLEHSSLFSGSYSSLPPNPLNSRAVEDISSSRTNPYSYAMSTEEARFLTYHMWP--LTF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     256 TLRFSIS------HAARMRTFMYWPSSVPVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PDLOSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           346 DEIQGRYPHLLEQLLSTSDTTGEEN--ADPPIIHFGPGESS-SEDAVMANTPVVKSALEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | : : |||:
403 GFNRDLVKQTVLSKILTTGENYKTVNDIVSALLNAEDBKREBEKEKQAEEMASDDLSLIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----LKSRL-----RGGKMRY--QEEBARLASFRNWPFYVQG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISPCVLSEAGFVFTGKODTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               415 SF-----ATDHLLGCDLSIAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KHISKPVQEPLVLPEVFGNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        491 ----CCPLINRFQLVFYLSLSSTR-----PDEGLASIICDQLLEK--EGSVTEMCMRNII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           523 IFKNC----LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEEQLRRLQEERTCKVCMDKEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         38 LEEEEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---OEMAAAGFYFTGVKSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28 LSDWINSNKOKMKYDFSCE-----LYRMSTYSTFPAGVPVSERSLARAGFYYTGVNDK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95 IQCFCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                           a. 6.3%; Score 462; DB 4; Length 618; Similarity 24.7%; Pred. No. 5.9e-33; Sopreative 93; Mismatches 238; Indels 154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540 QQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
CURRENT APPLICATION NUMBER: US/09/011,356A
CURRENT FILING DATE: 1998-09-14
EARLIER APPLICATION NUMBER: PCT/IB96/01022
EARLIER FILING DATE: 1996-08-05
EARLIER FILING DATE: 1996-12-22
EARLIER FILING DATE: 1995-12-22
EARLIER APPLICATION NUMBER: 08/576,956
EARLIER FILING DATE: 1995-12-2
EARLIER FILING DATE: 1995-12-2
SARLIER FILING DATE: 1995-08-04
NUMBER OF SEQ ID NOS: 45
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 223, Application US/09672717
Patent No. 6673917
GENERAL INFORMATION:
APPLICANT: Korneluk, Robert G.
APPLICANT: LaCasse, Eric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 24.7
Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
COGGANISM: Homo sapiens
US-09-011-356-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-672-717-223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              443
```

24;

7

```
24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81 VKCFCCGLMLDNWKLGDSPIQKHKQLYPSCSFIQNLVSASLGSTSKNTSPMRNSFAHSLS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   141 PTLEHSSLFSGSYSSLPPNPLNSRAVEDISSSRTNPYSYAMSTEEARFLTYHMWP--LTF 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95 IQCFCCSLILFGAGLTRLPIEDHKRFHPDCGF---LLNKDVGNIAKYDIRVKN----- 144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    176 ISPCVLSEAGFVPTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWPPKCEFLRSKKSSEE 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              236 ITQYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYBELRLDSFKDWPRESAVG 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        296 VAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVT 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                356 PDLQSR-GELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     346 DEIQGRYPHLLEQLLSTSDTTGEEN--ADPPIIHFGPGESS-SEDAVMMNTPVVKSALEM 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SF-----ATDHLLGCDLSIAS 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               443 KHISKPVQEPLVLPEVFGNL---NSVMCVEGEAGSGKTVL----LKKIAFLWASG---- 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           491 ----CCPLLNRFQLVFYLSLSSTR-----PDEGLASIICDQLLEK--EGSVTEMCMRNII 539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  523 IFKNC---LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEEQLRRLQEERTCKVCMDKEV 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           145 -----LKSRL-----LKSRL------RGGKMRY--QEEEARLASFRNWPFYVQG 175
                                                                                                                                                                                                                                                                                                                                                                                                 38 LEEBEQKERAKMOKGYNSOMRSEAKRLKTFVTYEPYSSWIP---QEMAAAGFYFTGVKSG 94
                                                                                                                                                                                                                                                                                                Query Match 6.3%; Score 462; DB 4; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;
Matches 159; Conservative 93; Mismatches 238; Indels 154; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----SWVFIPCGHLVVC---OECAPSLRKCPICRGIIKGTVRT 615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540 QQLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRT 583
             APPLICANT: Holcik, Martin
APPLICANT: Young, Sean
TITLE OF INVENTION: Antisense IAP Nucleic Acids and Uses
TITLE OF INVENTION: Thereof
FILE REPERENCE: 07891/025001
CURRENT APPLICATION NUMBER: US/09/672,717
CURRENT FILING DATE: 2000-09-28
NUMBER OF SEQ ID NOS: 231
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 223
LENGTH: 618
Baird, Stephen
                                                                                                                                                                                                                      tYPE: PRT
CORGANISM: Homo sapiens
US-09-672-717-223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          415
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ર્જ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
```

Search completed: March 26, 2005, 09:13:40 Job time : 30 Becs

ins Page Blank (uspto)

```
March 26, 2005, 09:12:04; Search time 101 Seconds (without alignments) 4599.352 Million cell updates/sec
                                                                                                                                                                                                                                                                                               1 MATQQKASDERISQFDHNLL.....SKYLTILQKWILPFSPIIQK 1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
6/ptodata/1/pubpaa/US10C_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:
/cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:
/cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:
/cgn2_6/ptodata/1/pubpaa/US60_PUBGOMB.pep:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:*
6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*
6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep:*
6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
version 5.1.6
- 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                        1407402 segs, 331100923 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                 OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                               BLOSUM62
Gapop 10.0 , Gapext 0.5
 GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                               US-09-830-338-1
7308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published
                                                                                                                                                                                                                                                                                                                                               Scoring table:,
                                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database :
                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                               Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 22, Appl	Sequence 24, Appl	Sequence 1, Appli	Sequence 9, Appli	Sequence 9, Appli	Sequence 33707, A	Sequence 11, Appl	Sequence 11, Appl	Sequence 33933, A	Sequence 5, Appli	Sequence 5, Appli	Sequence 2, Appli	Sequence 49, Appl
	ΙD	US-08-913-322-22	US-08-913-322-24	US-10-285-408-1	US-09-841-739-9	US-10-449-315-9	US-10-029-386-33707	US-09-841-739-11	US-10-449-315-11	US-10-029-386-33933	US-09-841-739-5	US-10-449-315-5	US-10-156-733-2	US-10-221-097-49
		8	8	14	σ	14	14	σ	14	14	σ	14	14	14
	Query Match Length DB	1403	1403	1403	782	782	385	868	868	203	1204	1204	1024	1070
ф	Query Match	100.0	100.0	100.0							9.0			8.9
	Score	7308	7308	7308	3970.5	3970.5	1975	1903	1903	1037	661	661	654	654
	Result No.		7	m	4	S	9	7	œ	σ	10	11	12	13

Sequence 2, Appli Sequence 2, Appli Sequence 97, Appl Sequence 97, Appl Sequence 1033, Ap		Sequence 4, Applia Sequence 3, Applia Sequence 63, Appla Sequence 8, Applia Sequence 78, Applia Sequence 78, Applia	0, -	Sequence 12, Appl Sequence 10, Appl Sequence 10, Appl Sequence 225, App Sequence 10, Appl Sequence 4, Appli Sequence 6, Appli
US-09-841-739-2 US-10-449-315-2 US-09-864-921-97 US-10-766-682-97 US-09-925-299-1033 US-09-925-299-1033	US-10-221-097-48 US-09-974-592-8 US-09-201-936-8 US-10-153-668-338 US-10-237-655-200 US-10-325-26-2	US-10-366-30/-4 US-10-361-270-3 US-10-636-065-223 US-10-636-065-223 US-10-600-272-8 US-10-730-476A-78 US-10-934-717-2	US-09-974-592-14 US-10-232-286-14 US-10-934-717-14 US-09-201-936-42 US-10-636-065-229 US-10-636-065-229	US-09-974-592-12 US-09-974-592-10 US-10-636-065-225 US-10-600-272-10 US-10-232-286-4 US-10-141-618-6
94. 61. 01.	4 6 6 7 7 7 7	16 16 16 17	9 10 10 10 10	7 0 0 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1
1024 1024 1024 1024 118	738 618 618 618 618	618 618 618 618 618	612 612 612 591 591	0 4 4 4 4 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0
888877 99887.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	, , , , , , , , , , , , , , , , , , ,		0000000
653 653 641 641 545.5	536 8 4 4 4 5 2 5 4 6 6 2 5 6 5 6 5 6 6 5 6 6 6 6 6 6 6 6 6	4 4 4 4 4 4 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0	457.5 457.5 457.5 441.5 441.5	44 43 7.5 44 37.5 44 37.5 44 37.5 6.5 6.5
114 115 117 118	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 3 5 5 7 6 8 8 7 8 8 8 7 8 8 8 9 7 8 8 8 9 7 8 9 8 9	W W W W W W W W W W W W W W W W W W W	2, 4 4 4 4 4 2, 0 11 13 12 13 13 13 13 13 13 13 13 13 13 13 13 13

ALIGNMENTS

```
Wishington No. 1920-22

15 Sequence 22, Application US/0891332

16 Sequence 22, Application No. US20020137028A1

16 SEQUENCE 22, Application No. US20020137028A1

17 Sequence 22, Application No. US20020137028A1

18 Sequence 22, Application No. US20020137028A1

18 Sequence 22, Application No. US20020137028A1

18 APPLICANT: Robert G.

19 APPLICANT: Robert G.

100.0%; Score 7308; DB 8; Length 1403;

100.0%; Pred. No. 0; Mismatches G.

10 MATQQKASDERISQPDHNLLPELSALIGLDAVQLAKELEBEERQKERAKWQKGYNSQMRSE G.

18 APPLICANT: Robert G.

18 APPLICANT: Robert G.

18 APPLICANT: Robert G.

19 APPLICANT: Robert G.

10 APPLICANT: Robert G.

11 APPLICANT: Rob
```

ö

61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF 120

ò

```
1141 EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                             QLHCLRVLSFFKTLNDDSVVEIAKVAISGGFQKLENLKLSINHKITEEGYRNFFQALDNM 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 KAGLFYTGIKDIVQCFSCGGCLBKWQBGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELBEBEKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEBEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LSEAGFVFTGKQDTVQCFSCGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                            SLPNFISLKILNLEGOOFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MATOOKASDERISOFDHINLLPELSALLGLDAVOLAKELEEEEQKERAKMOKGYNSOMRSE
                                                                                                                                 PNLOELDISRHFTECIKAQATTVKSLSQCVLRLPRLIRLNMLSWLLDADDIALLNVMKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1403;
                                                                                                                                                                                                                                                                   Sequence 24, Application US/08913322
; Sequence 24, Application US/08913322
; Publication No. US20020137028A1
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: Roy, Natalie
; APPLICANT: Robertson, George
; APPLICANT: Tamai, Katsu
; TITLE OF INVENTION: USER OF NEURONAL APOPTOSIS INHIBITOR
; TITLE OF INVENTION: USER OF NEURONAL APOPTOSIS INHIBITOR
; TITLE OF INVENTION: (NAIP)
; FILE REFERENCE: 07891/013001
; CURRENT APPLICATION NUMBER: US/08/913,322
; CURRENT FILING DATE: 1997-09-12
; EARLIER FILING DATE: 1997-01-17
; EARLIER FILING DATE: 1996-01-19
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 7308;
100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                    HPOSKYLTILOKWILPFSPIIOK 1403
                                                                                                                                                                                                   Best Local Similarity 100.
Matches 1403; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
CORGANISM: Homo sapiens
US-08-913-322-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                       1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                   1321
                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                       1201
                                                                                 1261
                                                                                                          1261
                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                               g
                                                                                                                                                     g
                                                                          $ B $
                                                                                                                                                                                      Š
                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MTVFSASQRIBLHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA 1140
                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLBTCFDKSQVPTIDQDYASAFEPMNEW 960
                                                                                             240
                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                       240
                                                                                                                                                  300
                                                                                                                                                                          300
                                                                                                                                                                                                     360
                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                             QLKNOVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED 720
                                           180
                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                               PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPRISLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLLRGLWOICPOAYFSMVSEHLLVLALKTAYOSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QYFFDHPESLSLLRSIHPPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MTVFSASQRIELHINHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKTQKTDLFVAAICAHWFQYPFDFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EDLINCIMSKFTÄGRIRPFYRFLSPÄRGEFLÄGMRLIELLDSDRQEHQDLGLYHLKQINS
     LSEAGFVFTGKODTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                              LSEAGFVFTGKQDTVQCFSCGGCLGNWEGGDDWKEHAKWFPKCEFLRSKKSSEBITQYI
                                                                                                                                                  OSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                   KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                       LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                                                                                                                          KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCWRNIIQ
                                                                                                                                                                                                                                                                                                                                                                            KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FDDVAVFKSYMERLSLRNKATABILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EDLIMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                    KAGLFYTGIKDIVOCFSCGGCLEKWOEGDDPLDDHTRCFPNCPFLONMKSSAEVTPDLOS
                                                                                                                                                                                                                                                       RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                            HPDCGFLLINKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1141
                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                         181
                                                                                                                                                   241
                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                 181
                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                          421
                                            121
                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8 6 8 6 8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                      8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                8 B S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8
                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                   <u>ک</u> و
                                                                                                                                                                                                                                                                                                                                                         8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               장 <u>염</u>
                                                                                                                                                                    8 A
                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                  δ
                    음
                                     8 8
                                                                                           8 8
```

ö

120 120 180 180

9

240

300

240

```
음
상
음
                                                                                                                                                                                                           a
                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                8 8
                                                                                                                                                                                                                                                                                                                              영 장
                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                     1140
                                                                                                                                                                                                                                                                                                                                                                                           EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                             ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                     961 ERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PNLQELDISRHFTECIKAQATTVKSLSQCVLRLPRLIRLNMLSWLLDADDIALLNVMKER 1380
                                                         540
                                                                                     900
                                                                                                                  9
                                                                                                                                9
                                                                                                                                              720
                                                                                                                                                            720
                                                                                                                                                                           780
                                                                                                                                                                                         780
                                                                                                                                                                                                        840
                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                 960
                                                                                                                                                                                                                                                                               960
 420
              420
                             480
                                          480
                                                                                            KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                     QLKNQVLFLLDDYKEICSIPQVIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                  APPFYNTVCILRKI.PSHNMTRLRKFMVYFGKNQSLQKIQKTPLFVAAICAHWPQYPFDPS
                                                                                                                         PDDVAVPKSYMERLSLRNKATABILKATVSSCGELALKGPFSCCPEFNDDDLABAGVDED
                                                                                                                                                      FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                                                                                                                                          EDLTMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                   BDLTMCLMSKFTAQRLRPFYRFLSPAFQBFLAGMRLIELLDSDRQEHQDLGLYHLKQINS
                                                                                                                                                                                                       PMMTVSAYNNPLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQ
                                                                                                                                                                                                                MQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                                             MQLLRGLWQICPQAYFSWVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                                 SLEVSGTIQSQDQIPPNLDKFLCLKELSVDLEGNINVFSVIPREFPNFHHMEKLLIQISA
                                                                                                                                                                                                                                                                                                                                                                                                               SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                             QLHCLRVLSFFKTLNDDSVVEIAKVAISGGFQKLENLKLSINHKITEEGYRNFFQALDNM
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1261 QLHCLRVLSFFKTLMDDSVVBIAKVAISGGFQKLENLKLSINHKITEEGYRNFFQALDMM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                               1201
             361
                                                                      481
                                                                                                                               601
                                                                                                                                                            199
                                                                                                                                                                          721
                                                                                                                                                                                        721
                                                                                                                                                                                                       781
                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                    1141
                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1321
361
                            421
                                                        481
                                                                                     541
                                                                                                                  601
                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1381
                                                                                                                                                        යි දි
8 8
                     8 8
                                                   8 6 8 6
                                                                                                               6 B 6
                                                                                                                                                                                    සු දු
                                                                                                                                                                                                                  음 강
                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                       음성
                                                                                                                                                                                                                                                                                                                     8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                               8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
```

```
USENCE 1. Application US/10285408

Sequence 1. Application US/10285408

Publication No. US20030108967A1

GENERAL INFORMATION:

APPLICANT: SAKAI, Harumi

TITLE OF INVENTION: and Method For Assaying the NAIP

FILE REFERENCE: 2002-1440/WMC/00653

CURRENT APPLICATION NUMBER: US/10/285,408

CURRENT FILING DATE: 2001-04-26

PRIOR PILING DATE: 2001-04-26

PRIOR PILING DATE: 1999-10-22

NUMBER OF SEQ ID NOS: 2

SEQ ID NOS: 2

SEQ ID NOS: 2

SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HPDCGFLLINKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEBLRLDSFKDWPRESAVGVAALA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OLKNOVLFLLDDYKEICSIPOVIGKLIOKNHLSRTCLLIAVRTNRARDIRRYLETILEIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNOSLQKIOKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           MATQQKASDERISQFDHNLLPELSALLGLDAVQLAKELEEEEQKERAKMQKGYNSQMRSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 AKRLKTFVTYEPYSSWIPQEMAAAGFYFTGVKSGIQCFCCSLILFGAGLTRLPIEDHKRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LSEAGFVFTGKQDTVQCFSCGGCLGNWEEGDDPWKEHAKWFPKCEFLRSKKSSEEITQYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KAGLFYTGIKDIVQCFSCGGCLEKWQEGDDPLDDHTRCFPNCPFLQNMKSSAEVTPDLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601 AFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 HPDCGFLLNKDVGNIAKYDIRVKNLKSRLRGGKMRYQEEEARLASFRNWPFYVQGISPCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LLDISSDLATDHLLGCDLSIASKHISKPVQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLL
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                       ;; Score 7308; I
;; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 1403; Conservative
                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                      US-10-285-408-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
```

Wed Mar

```
Sequence 9, Application US/10449315
Sequence 10. No. US20030190679A1
GENERAL INFORMATION:
APPLICANT: Bertin, John
TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE FILE REFERENCE: 07334-329001
CURRENT APPLICATION NUMBER: US/10/449,315
CURRENT FILING DATE: 2003-05-30
PRIOR APPLICATION NUMBER: US/09/841,739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LEGNINVESVIPEEFPNFHHMEKLLIQISAEYDPSKLVKLIQNSPNLHVFHLKCNFFSDF 1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1050
                                         ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  729
                                                                                                                                                            120
                                                                                                                                                                                         630
                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                   069
                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                           750
                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                     810
                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                             870
                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                990
                                                                                                 9
                                                                                                                                               KNOSLOKIOKTPLFVAAICAHWFQYPFDPSFDDVAVFKSYMERLSLKNKATAEILKATVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KNOSLOKIOKTPLFVAAICAHWFOYPFDPSFDDVAVFKSYMERLSLRNKATAEILKATVS
                                                                                                                                                                                                                                                                                                                                                                                       AYQSNTVAACSPFVLQFLQGRTLTLGALNLQYFFDHPESLSLLRSIHFSIRGNKTSPRAH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KLSPKQYKIPCLEVDVNDIDVVGQDMLEILMTVFSASQRIELHLNHSRGFIESIRPALEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           XLSPKQYKIPCLEVDVNDIDVVGQDMLEIIMTVFSASQRIELHLNHSRGFIESIRPALEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SKASVTKCSISKLELSAAEQELLLTLPSLESLEVSGTIQSQDQIFPNLDKFLCLKELSVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601 SKASVTKCSISKLELSAAEQELLITIPSLESLEVSGTIQSQDQIFPNLDKFLCLKELSVD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GSLMTMLVSCKKLTEIKFSDSFFQAVPFVASLPNFISLKILNLEGQQFPDEETSEKFAYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HLSRICLLIAVRINRARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMTRLRKFMVYFG
                                                                                                                                                                                                                                                                                                            SCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTWCLMSKFTAQRLRPFYRFLSPAFQEF
                                                                                                                                                                                                                                                                                                                              LAGMRLIELLDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNYVSSLPSTKAGPKIVSH
                                                                                                                                                                                                                                                                                                                                                                                                                              LIHI VDNKESLENI SENDDYLKHOPEISLOMOLLRGLWOICPOAYFSMVSEHLLVLALKT
                                                                                               BPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSSTR
                                                                                                                                PDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQVIGKLIQKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AYQSNTVAACSPFVLQFLQGRTLTLGALNLQYFFDHPESLSLLRSIHFPIRGNKTSPRAH
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LGSLSNLEELILPTGDGIYRVAKLIIQQCQQLHCLRVLSFFKTLNDDSVVBI 1282
                                        51;
           782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    730 LGSLSNLEELILPTGDGIYRVAKLIIQQCQQLHCLRVLSFFKTLNDDSVVEI
                                                                       EPLVL PEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQL
             Length
                                         1; Indels
           Score 3970.5; DB 9
Pred. No. 3.5e-308;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LEGNINVFSVIPEEFPNFHHMEKLLIQISAEYDPSKL-
               54.3%;
               Query Match
Best Local Similarity 93.6
Matches 779; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
US-10-449-315-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1231
                                                                         451
                                                                                                                                  511
                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                  811
                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        698
                                                                                                    н
                                                                                                                                                                                             571
                                                                                                                                                                                                                                                      631
                                                                                                                                                                                                                                                                                                                                                                        751
                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          면
당
당
당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     දු පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            장
음
                                                                                                                                                                                                                g
                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                     장
염
                                                                                                                                                                                                                                                                                                                                                                      8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              원
장
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                             g
                                                                                                                                 8
                                                                                                                                                         엄
                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 9, Application US/09841739
Sequence 9, Application US/09841739
Sequence 9, Application US/09841739
Batent No. US20020034784A1
GENERAL INFORMATION:
APPLICANT: Bertin, John
TITLE REFERENCE: 07334-329001
CURRENT APPLICATION NUMBER: US/09/841,739
CURRENT APPLICATION NUMBER: US 09/697,089
PRIOR APPLICATION NUMBER: US 60/161,822
                                                                                                                                                                                                                                                                                                                                                                                                      1140
                                                                                                                                                                                                                                                                                                                                                                                                                      1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVA 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QLHCLRVLSFFKTLNDDSVVEIAKVAISGGFQXLENLKLSINHKITEEGYRNFFQALDNM 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PNLQELDISRHFTECIKAQATTVKSLSQCVLRLPRLIRLNMLSWLLDADDIALLNVMKER 1380
                                                                                                                                                                                                                                                                                   ERNIAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKOYKIPCLEVDVNDIDVVGQDMLEIL 1020
                                                                                                                                                                                                                                                                                                                                              MTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLE 1080
                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                        960
                720
                                             780
                                                                          780
                                                                                                        840
                                                                                                                                                                900
                                                                                                                                                                                             900
FDDVAVFKSYMERLSLRNKATAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDED
                                                             PMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISENDYLKHQPEISLQ
                                                                                                                       MQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                           QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                          901 QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEW
                                                                                                                                                                                                                                                                                                                                                             SLEVSGTIQSQDQIFPNLDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SLPNFISLKILNLEGOOPPDEETSEKFAYILGSLSNLEELILPTGDGIYRVAKLIIQQCQ
                                                                                                                                                                  MOLLRGLWOICPOAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQFLQGRTLTLGALNL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HPOSKYLTILOKWILPFSPILOK 1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PŘT
; ORGANISM: Homo sapiens
US-09-841-739-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
US-09-841-739-9
                                                                                                                                                                                                                                                                                                                 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                   781
                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                              1021
                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                          721
                                                                                                         781
                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                     961
                                             721
                                                                                                                                                                                                                            901
                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                              8 6 8 6
                                                                                                                                                                                                                                                                                                                                                                                                    8 8 8
8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                            d
                                                                                                                                                            ò
                                                                                                                                                                                                                        9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                     8
                                                                    g
                                                                                                        Š
```

```
1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1051 SKASVTKCSISKLELSAAEQELLLTLPSLESLEVSGTIQSQDQIFPNLDKFLCLKELSVD 1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1111 LEGNINVFSVIPBEFPNFHHMEKLLIQISAEYDPSKLVKLIQNSPNLHVFHLKCNFFSDF 1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1171 GSLMTMLVSCKKLTBIKFSDSFPQAVPFVASLPNFISLKILNLEGOOFPDEETSEKFAYI 1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               729
                                                                                                                                                                                                                                                                                                                                                                                               121 HLSRTCLLIAVRINRARDIRRYLETILEIQAFPFYNTVCILRKLFSHNMTRLRKFMVYFG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  511 PDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLPLLDDYKEICSIPQVIGKLIQKN 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                  HLSRTCLLIAVRTNRARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMTRLRKFMVYFG 630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KNOSLOKIOKTPLFVAAICAHWFQYPFDPSFDDVAVFKSYMERLSLRNKATAEILKATVS 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301 LAGMRLIELLDSDROEHODLGLYHLKOINSPMMTVSAYNNFLNYVSSLPSTKAGPKIVSH 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361 LIHLVDNKESLENISENDDYLKHQPEISLQMQLLRGLWQICPQAYFSMVSEHLLVLALKT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421 AYQSNTVAACSPFVLQFLQGRTLTLGALNLQYPFDHPESLSLLRSIHFSIRGNKTSPRAH 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481 PSVLETCPDKSQVPTIDQDYASAPEPMNEWERNLAEKEDNVKSYMDMQRRASPDLSTGYW 540
                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AYQSNTVAACSPFVLQFLQGRTLTLGALMLQYFFDHPESLSLLRSIHFPIRGNKTSPRAH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601 SKASVTKCSISKLELSAAEQELLLTLPSLESLEVSGTIQSQDQIFPNLDKFLCLKELSVD
                                                                                                                                                                                                                                                                                                                           1 EPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSSTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KNOSLOKIOKTPLFVAAICAHWPOYPPDPSPDDVAVFKSYMERLSLRNKATAEILKATVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFYRFLSPAFQEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 SCGELALKGFPSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFYRFLSPAFQEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAGMRLIELLDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNYVSSLPSTKAGPKIVSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LLHLVDNKESLENISENDDYLKHQPEISLQMQLLRGLWQICPQAYFSMVSEHLLVLALKT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PSVLETCFDKSQVPT1DQDYASAFEPMNEWERNLAEKEDNVKSYMDMQRRASPDLSTGYW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KLSPKQYKIPCLEVDVNDIDVVGQDMLEILMTVPSASQRIELHLNHSRGFIESIRPALEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             451 EPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSSTR
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1231 LGSLSNLEELILPTGDGIYRVAKLIIQQCQQLHCLRVLSFFKTLNDDSVVEI 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                      51;
                                                                                                                                                                                                                                    DB 14; Length 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        730 LGSLSNLEELILPTGDGIYRVAKLIIQQCQQLHCLRVLSFFKTLNDDSVVEI
                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                 54.3%; Score 3970.5; DB 14
93.6%; Pred. No. 3.5e-308;
tive 1; Mismatches 1;
PRIOR FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: US 09/697,089
PRIOR FILING DATE: 2000-10-26
PRIOR APPLICATION NUMBER: US 60/161,822
PRIOR FILING DATE: 1999-10-27
NUMBER OF SEQ ID NOS: 16
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
LENGTH: 782
                                                                                                                                                                                                                                                                      Matches 779; Conservative
                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                US-10-449-315-9
                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                  571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         931
                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                        ઠ
                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
Sequence 33707, Application US/10029386

Sequence 33707, Application US/10029386

Publication US20030194704A1

GENERAL INFORMATION:
APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David R.
APPLICANT: HONENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR GFTILE OF INVENTION: EXPRESSION ANALYSIS TWO
FILE REFERENCE: AEOMICA-X-2
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 33707
LENGTH: 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence II, Application US/09841739
Patent No. US20020034784A1
GENERAL INFORMATION:
APPLICANT: Bertin, John
TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THEREFILE REFERENCE: 07334-329001
CURRENT APPLICATION NUMBER: US/09/841,739
CURRENT APPLICATION NUMBER: US 09/697,089
PRIOR APPLICATION NUMBER: US 09/697,089
PRIOR FILING DATE: 2000-10-26
PRIOR FILING DATE: 1999-10-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DQDYASAFEPMNEWERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIPCLEVDV 1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NDIDVVGQDMLEILMTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELS 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DQDYASAFEPMNEWERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKI PCLEVDV 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301 NDIDVVGQDMLEILMTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELS 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 HQDLGLYHLKQINSPMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISE 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 NDDYLKHOPEISLOMOLLRGLWQICPQAYFSMVSEHLLVLALALKTAYQSNTVAACSPFVLQ 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 FNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIELLDSDRQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HODLGLYHLKQINSPMMTVSAYNNFLNYVSSLPSTKAGPKIVSHLLHLVDNKESLENISE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NDDYLKHQPEISLQMQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNTVAACSPFVLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 FLQGRTLTIGALNLQYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FLOGRILILGALNLQYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  707 FNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFYRFLSPAFQBFLAGMRLIELLDSDRQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 385;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: MAP TO U80017.1
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.91
OTHER INFORMATION: SWISSPROT HIT: Q13075, EVALUE 0.00e+00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 27.0%; Score 1975; DB 14; Best Local Similarity 100.0%; Pred. No. 5.2e-149; Matches 385; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1067 AAEQELLITLPSLESLEVSGTIQSQ 1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAEOELLLTLPSLESLEVSGT10S0 385
                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
RESULT 6
US-10-029-386-33707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-386-33707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
US-09-841-739-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ਠੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ਨੇ
```

```
-----CSISKLELSAAEQELLLTLPSLES----LE-----VSGTIQSQDQIFPNL 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SYMDMQRRASPDLSTGYWKLSPKQYKIP----------CLEVDVNDIDVV 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVASLPNFISLKILNLEGQ 1216
                                                                                                                                                 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----RGFIESIRPALELSKASVTK---- 1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1099 DK--FLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISAEYDPSKLVKLIQNSPN 1156
                                                                                                                                                                                                                        999
                                                                                                                                                                                                                                                                                                                       680
                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                      800
                                                                                                                                                                                                                                     61 ADGGLASILCDQLLDIEGSVTEQTFRAILLQLKNQVLFLLDGYNEIKPQNCSIPQVIGAL 120
                                                                                                                                                                                                                                                                                     861 EHLLVLALKTAYOSNTVAACSPFVLO-FLOGRTLTLGALNL-OY---FFDH-PESLSLLR 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 681 TAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFY 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     801 TKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQMQLLRGLWQICPQAYFSMVS 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 VEAGRAVVSHLAAVVDNKGSLLGLSIADDYLKHQESISLQMQLLQGVKNITEQAILSAVS 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDY--ASAFEPMNEWERNLAEKEDNVK 972
                                                                                                                                                                                                                                                                        IQKNHLSRTCLLIAVRTNRARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMTRLRKFM 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----VASLEEVISLVÍLGLEGO 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      792 ÓLTDTEISILGAFIGLGSLSNLEELILAGGDVSSDGWLAFMGVFEVAKLLVFFDFSTKEF 851
                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                     RFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNYVSSLPS
                                                                                                                                                                                      PDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEI----CSIPQVIGKL
                                                                                                                                                                                                                                                                                                                      VYFGKNQSLQKIQKTPLFVAAICA-HWFQYPFDPSFDDVAVFKSYMERLSLRNK----A
                                                                                                                                                                                                                                                                                                                                                                                   OPPDEETSEKFAYI-LGSLSNLEELILPTGD------GIYRVAKL-----
                                                                                                                                                                        451 EPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSSTR
                                                                                                                                                  Gaps
                                                                                                                                                88; Mismatches 214; Indels 164;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                         Score 1903; DB 9;
Pred. No. 1.2e-142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1013 GODMLEIL--MTVFS----ASQRIELHLNHS.
             Version 4.0
                                                                       FEATURE:
CTHER INFORMATION: majority sequence
US-09-841-739-11
                                                TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                        26.0%;
NUMBER OF SEQ ID NOS: 16
SOFTWARE: FastSEQ for Windows
SEQ ID NO 11
LENGTH: 898
                                                                                                                                                tches 484; Conservative
                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1157
                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                      741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                        511
                                                                                                                                                                                                                                                                       567
                                                                                                                                                                                                                                                                                                                      627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   973
                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                         g
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6 6 6 6 6 6 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
P
```

```
THEREC
                                                                               ## Sequence 11, Application US/10449315

## Sequence 11, Application US/10449315

## Publication No. US20030190679A1

## GENERAL INFORMATION:

## APPLICANT: Bertin, John

## TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES

## TITLE OF INVENTION: NUMBER: US/10/449,315

## CURRENT APPLICATION NUMBER: US/09/841,739

## PRIOR FILING DATE: 2001-08-29

## PRIOR FILING DATE: 2000-10-26

## PRIOR FILING DATE: 2000-10-26

## PRIOR FILING DATE: 1999-10-27

## NUMBER OF SEQ ID NOS: 16

## SEQ ID NO 11

## LINGTHER B98
                                                                                                                                                          USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 AADILKATVSSCGDLALEGVFSHKFDFELDDVAEAGVDEDVLLTTGLLSKFTAQRLKPFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EHLLVLALKTAYQSNTVAACSPFVLQ-FLQGRTLTLGALNL-QY---FFDH-PESLSLLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   451 EPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSSTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EQLVLNGVLGALNSVCIVEGEAGSGKSVLLQKIAFLWGSGKCKALTKFQLVFFLSLSSTR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    511 PDEGLASIICDQLLEKEGSVŢEMCMRNIIQQLKNQVLFLLDDYKEI----CSIPQVIGKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 ADGGLASILCDQLLDIEGSVTEQTFRAILLQLKNQVLFLLDGYNEIKPQNCSIPQVIGAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VYFGKNOSLOKIDLFVAAICA-HWFQYPFDPSFDDVAVFKSYMERLSLRNK----A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RFLSPAFOEFLAGMRLIELLDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNYVSSLPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TKAGPKIVSHLLHLVDNKESLENISENDDYLKHQPEISLQMQLLRGLWQICPQAYFSMVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
----LNDDSVVEIAKVAISGGFQ 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164;
              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 26.0%; Score 1903; DB 14; 50.9%; Pred. No. 1.2e-142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88; Mismatches 214;
 ----IIQQCQQLHCLRVLSFFKT---
                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMATION: majority sequence US-10-449-315-11
                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 26.0°
Best Local Similarity 50.9°
Matches 484; Conservative
 1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄 상
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
```

SIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDY--ASAFEPMNEWERNLAEKEDNVK 972

915

Š

원 장

```
Sequence 5, Application US/09841739
Patent US20020034784A1
GENERAL INFORMATION:
APPLICANT: Bertin, John
TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE CURRENT APPLICATION NUMBER: US/09/841,739
CURRENT FILING DATE: 2001-08-29
PRIOR APPLICATION NUMBER: US 69/697,089
PRIOR PILING DATE: 2000-10-26
PRIOR PPLING DATE: 1999-10-27
NUMBER OF SEQ ID NOS: 16
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        956 PMNEWERNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIP-------- 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341 NCPFLONMK-SSAEVTPD---LOSRGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQW 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              258 -----LAQDLKDLYHTPSFLNF------YPLGEDIDIIFNLKSTFTEPVLWRK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 745 SGNIPDYLFD---------FFEHLPNC--ASALDFIKLDFYGG-- 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          450 ----QEPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300 DQHHHRVEQLTLNGLLQALQSPCIIEGESGKGKSTLLQRIAMLWGSGKCKALTKFKFVFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQ--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      562 -VIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILBIKAPPFYNTVCILRKLFSHNMT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416 PEIEALIKENHRFKNMVIVTTTECLRHIRQFGALTAEVGDMTEDSAQALIREVLIKELA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 680 ----ATABILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SLOMQLLRGLWQICPQAYFSMVSEHLLVLALKTAYQSNT-VAACSPFVLQFLQGRTLTLG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97 ALNL-QYFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  216 NYPLFQDINGQSFEFTQNWVFFNITSSLIGLFHQTSEGDLDD-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           397 FQBAKNLNEQLRAAYTSASPRHMSLLDISSDLATDHLLGCDLSI---ASKHISKPV---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621 RLRKFMYYFGKNOSLOKIOKTPLFVAAICAHWFQYPFDPSFDDVAVFKSYMERLSLRNK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RLRPFYRFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     795 V--SSLPSTKAGPKIVSHLLHLVDN-------KBSLENISENDDYLKHQPBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 9.0%; Score 661; DB 9; Length 1204; Best Local Similarity 23.5%; Pred. No. 4.4e-43; Matches 268; Conservative 199; Mismatches 427; Indels 245;
                                                                                                                                                                                                                                                                                                                                                                                       trype: PRT CRGANISM: Homo sapiens US-09-841-739-5
                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <del>Q</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR TITLE OF INVENTION: EXPRESSION ANALYSIS TWO FILLE REFERENCE: AEOMICA-X-2 CURRENT APPLICATION NUMBER: US/10/029,386
CURRENT PILLING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 34288
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 33933
LENGTH: 203
                                                                                                                                                                                                                                                                                          1216
                                                                                                                                  1058 -----CSISKLELSAAEQELLLTLPSLES----LE-----VSGTIQSQDQIFPNL 1098
                                                                                                                                                                                                               DK--FLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISAEYDPSKLVKLIQNSPN 1156
                                                                                                                                                                                                                                                                                                                                                                    1217 OPPDEETSEKFAYI-LGSLSNLEELILPTGD-----GIYRVAKL----- 1254
                                                                                                                                                                                                                                                      767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  448
                                                                                                                                                                                                                                                                                                                                 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                           851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
GODMLEIL--MIVFS----ASQRIELHLNHS----RGFIESIRPALELSKASVTK----
                                                                               661 KNLKKMCLISLLELSAAGEGLILIVKSLSSEPCDLEEIQLVSCCLVAGAVQILAQILHNL
                                                                                                                                                                                                                                     1157 LHVFHLKCNFFSDFGSLMTMLVSCKKLTEIKFSDSFFQAVPFVASLPNFISLKILNLEGQ
                                                                                                                                                                                                                                                                                                                                                                                                       792 QLTDTRISILGAFIGLGSLSNLERLILAGGDVSSDGWLAFMGVFEVAKLLVFFDFSTKBF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            449 VQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 VQEPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TRPDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLPLLDDYKEICSIPQVIGKLIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TRPDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQVIGKLIQ
                                                                                                                                                                                                                                                                                                                            ------GSLSSL-------VASLBEVISLVILGLEGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 389 MAQGEAQWPQEAKNINEQLRAAYTSASFRHMSLLDISSDLATDHLLGCDLSIASKHISKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----IIQQCQQLHCLRVLSFFKT-----LNDDSVVBIAKVAISGGFQ 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     852 LPDPALVQQLSQV--LSVLSFLQTARLVGWQLDDDSV-----VVITGAFK 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 203;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTHER INFORMATION: MAP TO AC005031.1

OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.6

OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.95

OTHER INFORMATION: SWISSPROT HIT: Q13075, EVALUE 1.00e-112
US-10-029-386-33933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 14.2%; Score 1037; DB 14;
Best Local Similarity 100.0%; Pred. No. 2.1e-74;
Matches 203; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 33933, Application US/10029386 Publication No. US20030194704A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KNHLSRTCLLIAVRTNRARDIRR 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KNHLSRTCLLIAVRTNRARDIRR 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-029-386-33933
                     541
                                                        1013
                                                                                                                                                                                                               1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   569
                                                                                                                                                                                                                                                                                                                               768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
                                                        δ
                                                                                  8 8
                                                                                                                                                                                                          ઠે
                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
```

360 LRLSRAQGGLFETLCDQLLDIPGTIRKQTFWAMLLKLRQRVLFLLDGYNEFKPQNC 41 562 -VIGKLIQKNHLSRTCLLIAVRTNRARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMT 62	OY 680ATABILKATVSSCGBLALKGFFSCCFEFNDDDLAEAGVDEDEDLINGLMSKFTAQ 734 :	897 ALNL-QYFFDHPESLSLLRSIHFPIRGNKTSPRA : : 745 SGNIPDYLFD	1061 877 1119 933 1179	Qy ::::	RESULT 12 US-10-156-733-2 ; Sequence 2, Application US/10156733 ; Publication No. US2003009969A1 ; GENERAL INFORMATION: ; APPLICANT: Alnemri, Emad S. ; TITLE OF INVENTION: IPAF, AN ICE-PROTEASE ACTIVATING ; TITLE OF INVENTION: FACTOR ; FILE REFERENCE: 480140.477
	Qy 1119 SVIPEEPPNFHHMEKLLIQISAEYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLV 1178 : :	SULT 11 Sequence 5, Application US/10449315 Publication No. US20030190679A1 SET TOWNERAL INFORMATION:	INVESTION INVESTION RENCE: 07. PPLICATION ILLING DATE: ILLICATION I ILLICATION I ILLICATION I ILLICATION I ILLICATION I ILLICATION I ILLICATION I ILLICATION I ILLICATION I RESELSED I	SEQ ID NO 5 LENGTH: 1204 TYPE: PRT ORGANISM: Homo sapiens S-10-449-315-5 Query Match Best Local Similarity 23.5%; Pred. No Matches 268; Conservative 199; Misma Matches 168; Conservative 199; Misma y 341 NCPFLQNMK-SSAEVTPDLQSRGEL b 216 NYPLFODLNGOSFEETONWVFFNITSSL	397 FQEAKNLNEQLRAAYTSASFRHMSLLDISSDLATDHLLGCDLSIASKHISKPV 4 258LAQDLKDLYHTPSFLNFYPLGEDIDIIFNLKSTFTEPVLWRK 2 450QEPLVLPEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFY 5 300 DQHHHRVEQLTLNGLLQALQSPCIIEGESGKGKSTLLQRIAMLWGSGKCKALTKFKFVFF 3 504 LSLSSTRPDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQ 5

Wed Mar

us-09-830-338-1.rapb

```
US-10-221-097-49
                                                                                                          1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       469
                                                                                                                             d
                                ద
                                                           ð
                                                                             a
                                                                                                   8
                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                            42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          962 RNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIP--------CLEVDV 1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NDIDVVGQDMLEILMTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELS 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .067 AARQELLITLPSLESLEVSGTIQSQDQIFPN--LDKFLCLKELSVDLEGNINVFSVIPEE 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FPNFHHMEKLLIQISAEYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVS---- 1179
                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999
                                                                                                                                                                                                                                        148
                                                                                                                                                                                                                                                              509
                                                                                                                                                                                                                                                                                                            566
                                                                                                                                                                                                                                                                                                                                    264
                                                                                                                                                                                                                                                                                                                                                          626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              818
                                                                                                                                                                                                                                                                                                                                                                                                                       :|:| :: || : : :: |
BATRA---VMKHLAAVYQHGCLLGLSIAKRPLWRQESLQSVKN------TTEQEI 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -------FFEHLPNC--ASALDFIKLDFYGG--AMASWE 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LRGLWQICPQAYFSMVSEHLLVLALKTAYQSNT-VAACSPFVLQFLQGRTLTLGALNL-Q 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LKAI----NINSFVECGIHL-----YQESTSKSALSQEFEAFFQGKSLYINSGNIPD 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            902 YFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEWE 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  383 ASDFIR-SLDHCGDLALEGVFSHKFDFELQDV--SSVNEDVLLTTGLLCKYTAQRFKPKY
                                                                                                                                                                344 FLONMKS-SAEVTPDLOSRGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKN
                                                                                                                                                                               QEPLVL PEVFGNLNSVMCVEGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSST
                                                                                                                                                                                                                                                                           RPDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQ---VIGKL
                                                                                                                                                                                                                                                                                                                         567 IQKNHLSRTCLLIAVRTNRARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMTRLRKFM
                                                                                                                                                                                                                                                                                                                                                                         VYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPSFDDVAVFKSYMERLSLRNK-----A
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TARILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RFLSPAFQEFLAGMRLIELLDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNYV--SSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PSTKAGPKIVSHLLHLVDN-------KESLENISENDDYLKHQPEISLQMQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LNEQLRAAYTSASFRHMSLLDISSDLATDHLLGCDLSI---ASKHISKPV-----
                                                                                                                                            Gaps
                                                                                                                   Query Match 8.9%; Score 654; DB 14; Length 1024; Best Local Similarity 23.7%; Pred. No. 1.2e-42; Matches 263; Conservative 197; Mismatches 410; Indels 238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/156,733 CURRENT FILING DATE: 2002-05-24 NUMBER OF SEQ ID NOS: 14 SOFTWARE: FASTSEQ for Windows Version 4.0 SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    594 YLFD------
                                                         ; LENGTH: 1024
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-156-733-2
                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                     149
                                                                                                                                                                                                               403
                                                                                                                                                                                                                                                            450
                                                                                                                                                                                                                                                                                                                                                                                 265
                                                                                                                                                                                                                                                                                                                                                                                                        627
                                                                                                                                                                                                                                                                                                                                                                                                                                                     681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1007
                                                                                                                                                                                                                                                                                                                                  207
                                                                                                                                                                                                                                                                                                                                                                                                                               323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    741
                                                                                                                                                                                    g
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                             ದ್ದ
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          줨
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
```

```
----QKLENLKLSINHKITEEGYRNFFQALDNMPNLQELDISRHFTECIKAQATTVKSL 1346
1180 -CKKLTEIKFSDSFF--QAVPFVA-SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLS 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48;
                                                                                                                                                                                                                                                                                                                                                    931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----HLLGCDLSI---ASKHISKPV-----QEPLVLPEVFGNLNSVMCV 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   332 LD-----DHTRCFPNCPFLQNMKSSA--EVTPDL-----QSRGEL----CELLETISES 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI----IHMILKKGSESCNLFLKSLKEWNYPLFQDLNGQSLFHQTSEGDLDDLAQDLKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EGEAGSGKTVLLKKIAFLWASGCCPLLNRFQLVFYLSLSSTRPDEGLASIICDQLLEKEG
                                                                   1236 NLEE----LILPTGDGIYRVAKLIIQQCQQLHCLRVLSFFKTLNDDSVVEIAKVAISGGF-
                                                                                                                                                                                                                                                                                                                   44 LDYLNFIKDNSRA----LIQRMGMTVIKQITDDLFVWNVLNREEVNIICCEKVEQDAAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | : | | : | : | | : | : | | : | : | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  277 YEELRLD----SFKDWPRESAVGVAALAKAGLFYTGIKDIVQCFSCGGCLEKWQEGDDP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           375 NLEDSIAVGPIVPEMAQGEAQWFQEAKNLNEQLRAAYTSASFRHMSLLDISSDLATD---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 8.9%; Score 654; DB 14; Length 1070; Best Local Similarity 23.3%; Pred. No. 1.3e-42; Matches 282; Conservative 213; Mismatches 454; Indels 260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Agarwal, Pankaj
APPLICANT: Agarwal, Pankaj
APPLICANT: Murdock, Paul R.
APPLICANT: Rizvi, Safia K.
APPLICANT: Smith, Randall F.
APPLICANT: Smith, Randall F.
APPLICANT: Xiang, Zhaoying
TITLE OF INVENTION: NOVEL COMPOUNDS
FILE REFERENCE: GP50016
CURRENT APPLICATION NUMBER: US/10/221,097
CURRENT FILING DATE: 2002-09-06
PRIOR FILING DATE: 2001-03-05
PRIOR APPLICATION NUMBER: 60/187,107
PRIOR FILING DATE: 2000-10-03
NUMBER OF SEQ ID NOS: 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | | :: | | :: : | SQVLSKLTFLQEARLVGWQFDDDDLSVI 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOCVLRIPRLIRINMLSWLLDADDIALL 1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Sequence 49, Application US/10221097; Publication No. US20030144476A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
CRGANISM: Homo sapiens
US-10-221-097-49
```

42;

Gaps

238;

206 999 626

264

680

382

740 439 798 901

196

```
RNLAEKEDNVKSYMDMQRRASPDLSTGYWKLSPKQYKIP-------CLEVDV 1006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NDIDVVGQDMLEILMTVFSASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELS 1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LKAI----NINSFVECGIHL-----YQESTSKSALSQEFEAFFQGKSLYINSGNIPD 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IOKNHLSRTCLLIAVRINRARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMTRLRKFM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LRGLWQICPQAYFSMVSEHLLVLALKTAYQSNT-VAACSPFVLQFLQGRTLTLGALNL-Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YFFDHPESLSLLRSIHFPIRGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEWE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             : |:: |:: || || || || || IQIQKSRCLRNLMKTPLFVVITCAIQMGESEFHSHTQTTLFHTFYDLLIQKNKHKHKGVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ::: :: :: :: :: EATRA---VMKHLAAVYQHGCLLGLSIAKRPLWRQESLQSVKN------TTBQBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ------FFEHLPNC--ASALDFIKLDFYGG--AMASWE
                                                                                                                                                                                                                                                                                                                                                                                                                           344 FLONMKS-SAEVTPDLOSRGELCELLETTSESNLEDSIAVGPIVPEMAQGEAQWFQEAKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 LAODLKOLYHTPSFLNF------YPLGEDIDIIFNLKSTFTEPVLWRKDQHHHR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149 VEQLTINGILQALQSPCIIEGESGKGKSTLLQRIAMLWGSGKCKALTKFKFVFFLRLS--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         627 VYFGKNQSLQKIQKTPLFVAAICAHWFQYPFDPSFDDVAVFKSYMERLSLRNK----A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TABILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RFLSPARGEFLAGMRLIELLDSDROEHODLGLYHLKOINSPMMTVSAYNNFLNYV--SSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PSTKAGPKIVSHLLHLVDN-------KESLENISENDDYLKHQPEISLQMQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QEPLVL.PEVFGNLNSVMCVEGEAGSGKTVLLKKI.AFLWASGCCPLLNRFQLVFYLSLSST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RPDEGLASIICDQLLEKEGSVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQ---VIGKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INEQLRAAYTSASFRHMSLLDISSDLATDHLLGCDLSI---ASKHISKPV-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1024;
                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 23.7%; Pred. No. 1.5e-42;
Matches 263; Conservative 197; Mismatches 410; Indels
                                                                                                                                                                                                                                                                                                                                  Score 653; DB 9;
Pred. No. 1.5e-42;
            CURRENT APPLICATION NUMBER: US/09/841,739
CURRENT FILING DATE: 2001-08-29
FRIOR APPLICATION NUMBER: US 09/697,089
FRIOR FILING DATE: 2000-10-26
FRIOR APPLICATION NUMBER: US 60/161,822
FRIOR FILING DATE: 1999-10-27
NUMBER OF SEQ ID NOS: 16
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 1024
FILE REFERENCE: 07334-329001
                                                                                                                                                                                                                                             TYPE: PRT
CORGANISM: Homo sapiens
US-09-841-739-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           594 YLFD-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1007
                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       පු
                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1252 AKLIIQQCQQLHCLRVLSFFKTLNDDSVVEIAKVAISGGF-----QKLENLKLSINHKI 1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ::|: | ::| | ::| | | ::| | | ::| | ::| | ::| | ::| | ::| | ::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| | :::| :::| | :::| :::| | :::| | :::| :::| | :::| :::| :::| :::| | :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           981 ASPDLSTGYWKLSPKQYKIP------CLEVDVNDIDVVGQDMLEILMTVFS 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1026 ASQRIELHLNHSRGFIESIRPALELSKASVTKCSISKLELSAAEQELLLTLPSLESLEVS 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1306 TEEGYRNFFQALDNMPNLQELDISRHFTECIKAQATTVKSLSQCVLRLPRLIRLNMLSWL 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTIQSQDQIFPN--LDKFLCLKELSVDLEGNINVFSVIPEEFPNFHHMEKLLIQISAEYD 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1196 VPFVA-SLPNFISLKILNLEGQQFPDEETSEKFAYILGSLSNLEE---LILPTGDGIYRV 1251
                                                                                                            645
                                                                                                                                                                                                   669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    825
                     582
                                                                                                                                                                                                                                             446
                                                                                                                                                                                                                                                                                        759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ------KESLENISENDDYLKHQPRISLQMQLLRGLWQICPQAYFSMVSEH 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             863 LLVLALKTAYOSNT-VAACSPFVLOFLOGRTLTLGALNL-QYFFDHPESLSLLRSIHFPI 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921 RGNKTSPRAHFSVLETCFDKSQVPTIDQDYASAFEPMNEWERNLAEKEDNVKSYMDMQRR 980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LDSDRQEHQDLGLYHLKQINSPMMTVSAYNNFLNYV--SSLPSTKAGPKIVSHLLHLVDN 817
                                                                                                                                                                                                                                                                                                                                                                                                                         LTSHEPEEVTKGNGYLQKMVSISDITSTYSSLLRYTCGSSVEATRA---VMKHLAAVYQH 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SVTEMCMRNIIQQLKNQVLFLLDDYKEICSIPQ---VIGKLIQKNHLSRTCLLIAVRTNR
                                                                                                                                                                                                 AAICAHWFQYPFDPSFDDVAVFKSYMERLSLRNK-----ATAEILKATVSSCGELALKG
                                                                                                                                                                                                                            FFSCCFEFNDDDLAEAGVDEDDLTWCLMSKFTAQRLRPFYRFLSPAFQEFLAGMRLIEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1144 PSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVS-----CKKLTEIKFSDSFF--QA
                                                                                                         ARDIRRYLETILEIKAFPFYNTVCILRKLFSHNMTRLRKFMVYFGKNOSLOKTPLFY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----FFEHLPNC--ASALDFIKLDFYGG--AMASWE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---DLQNQRLPGGLTDSLGNLKNLTKLIMDNIKM---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 14
US-09-841-739-2
; Sequence 2, Application US/09841739
; Patent No. US20020034784A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LDADDIALL 1374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | |{::::
1053 FDDDDLSVI 1061
                                                                                                                                                                                                                                                                                      700
                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       607
                                                                                                          586
                                                                                                                                                                                                 949
                                                                                                                                                                                                                                                                                                                                                                               760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1366
                                                                                                                                                                                                                                                                                                                                                                        8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                   상 심
                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
S
S
                   8 6
                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     品 格 品 谷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 8
```

1067 AAEQELLITLPSLESLEVSGTIQSQDQIFPN--LDKFLCLKELSVDLEGNINVFSVIPEE 1124

:: :: :: ::

ò

APPLICANT: Bertin, John TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE

Db 323 LQIQKSRCLRNLMKTPLFVVITCAIQMGESEFHSHTQTTLFHTFYDLLIQKNKHKKHKGVA 382 Qy 681 TAEILKATVSSCGELALKGFFSCCFEFNDDDLAEAGVDEDEDLTMCLMSKFTAQRLRPFY 740 Since in the control of	844 LRGLWQICPQAYFSMVSEHLLVLALKTAYQSNT-VAACSPFVLQFLQGRTLTLGALNL-Q :	92 NUALBERDINGSTRUBULE OF THE STATE OF THE STATE OF THE STATE OF STATE OF THE STATE OF STATE
Db 726 IEDERHITSVTNLKTLSIHDLQNQRLPGGLTDSLGNLKNLTKLIMDNIKM 775 1125 FPNFHHMEKLIQISAEYDPSKLVKLIQNSPNLHVFHLKCNFFSDFGSLMTMLVS 1179	OY 1292OKLENLKLSINHKITEEGYRNFFQALDNMPNLQELDISRHFTECIKAQATTVKSL 1346 : : : :	RESULT 15. 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-49-115-2 18.2012-10-2 2012-10-2

This Page Blank (uspto)